

(b) a SakK gene, or a functional analogue thereof;

(c) a SakR gene, or a functional analogue thereof;

(d) a vector comprising a cloned polynucleotide of interest linked to a first inducible promoter,

wherein in said gene expression system, the expression product of the IF gene, or functional analogue thereof, activates the expression product of the SakK gene, or functional analogue thereof, and

the activated expression product of the SakK gene, or functional analogue thereof, activates the expression product of the SakR gene, or functional analogue thereof, and

the activated expression product of the SakR gene, or functional analogue thereof induces the first promoter of the gene of interest,

thereby causing expression of the gene of interest; and

wherein the expression product of said IF gene or functional analogue thereof is not a lantibiotic.

45. A gene expression system comprising:

(a) an IF gene;

(b) a SakK gene;

(c) a SakR gene;

(d) a vector comprising a cloned polynucleotide of interest linked to a first inducible promoter,

wherein in said gene expression system, the expression product of the IF gene activates the expression product of the SakK gene, and

the activated expression product of the SakK gene activates the expression product of the SakR gene and

D the activated expression product of the SakR gene induces the first promoter of the gene of interest,

thereby causing expression of the gene of interest; and

wherein said the expression product of said IF gene is not a lantibiotic.

46. The gene expression system of claim 44, wherein said expression product of the IF gene, or a functional analogue thereof, comprises the sequence of residues 19-37 of SEQ ID NO:3.

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E5
CMT d.

47. The gene expression system of claim 45, wherein said expression product of an IF gene has the amino acid sequence of residues 19-37 of SEQ ID NO:3.

48. The gene expression system of claim 44, wherein the SakK gene and the SakR gene are operably linked to a constitutive promoter.

49. The gene expression system of claim 48, wherein the SakK gene and the SakR gene operably linked to a constitutive promoter are located on a second vector.

D 50. The gene expression system of claim 44, wherein the SakK gene and the SakR gene are operably linked to a second inducible promoter.

51. The gene expression system of claim 50, wherein the SakK gene and the SakR gene operably linked to a second inducible promoter are located on a second vector.

52. The gene expression system of claim 44, wherein a functional analogue of the IF gene is a plnA gene, a functional analogue of the SakK gene is a plnB gene, a functional analogue of the SakR gene is a plnC gene or a plnD gene,

wherein plnA, plnB, plnC, and plnD are genes of a lactic acid bacterium.

53. A host cell comprising the gene expression system of claims 44 or 45.

54. The host cell of claim 53, wherein the host cell is a Gram-positive bacterium.

55. The host cell of claim 54, wherein the host cell is a lactic acid bacterium.

D 56. The host cell of claim 55, wherein the host cell is selected from the group of genera consisting of *Lactobacillus*, *Lactococcus*, and *Pediococcus*.

57. The host cell of claim 56, wherein the host cell is *Lactobacillus sake* or *Lactobacillus plantarum*.

58. The host cell of claim 57, wherein said host cell is *Lactobacillus sake* LTH673 or *Lactobacillus plantarum* C11.

59. The gene expression system of claim 44, wherein said IF gene, said SakK gene, and said SakR gene are components of a same operon.

60. The gene expression system of claim 44, wherein said IF gene and said SakK gene are components of a same operon.

61. The gene expression system of claim 44, wherein said IF gene and said SakR gene are components of a same operon.

62. A method for producing a protein of interest comprising culturing a host cell comprising the gene expression system of claim 44 in a medium, wherein expression of the gene of interest produces the protein of interest; and purifying the protein of interest from the culture.

63. A method for producing a protein of interest comprising culturing a host cell comprising the gene expression system of claim 45 in a medium, wherein expression of the gene of interest produces the protein of interest; and purifying the protein of interest from the culture.

64. A kit for a gene expression system, comprising

a) at least one vector comprising a promoter that can be induced by the expression product of a SakR gene or a functional

analog thereof, that is activated by the expression product of a SakK gene or a functional analog thereof, that is activated by the expression product of an IF gene or a functional analog thereof, a cloning site, and at least one gene selected from the group consisting of a SakK gene of a lactic acid bacterium, a SakR gene of a lactic acid bacterium, an IF gene of a lactic acid bacterium, or a functional analogue of said genes; and

D b) a host strain having a chromosome comprising ~~of~~ at least one gene selected from the group consisting of a SakK gene of a lactic acid bacterium, a SakR gene of a lactic acid bacterium, an IF gene of a lactic acid bacterium, or a functional analogue of said genes.

65. An isolated nucleic acid comprising:

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EP two repeated nucleotide sequences 5 to 10 nucleotides long and spaced 17 to 23 nucleotides apart, wherein the downstream member of said repeated sequence is located 30 to 38 nucleotides downstream from a -10 region of a bacterial gene,

wherein said isolated nucleic acid promotes transcription of an operatively linked coding nucleic acid sequence which is activated by an expression product of a SakR gene or functional